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Mr. Burge is a research staff member at the Thomas J. Watson Research Center, and has been with IBM since 1965. He received a B.A. degree in mathematics from Cambridge University in 1954, and was a research assistant at U.C.L.A. in 1955. He was with E.M.I. Electronics Ltd. from 1956 to 1963, working on the design of a computer and its programming systems. From 1963 until joining IBM he was Manager of Programming Research for the UNIVAC Division of the Sperry Rand Corporation. He is the author of many papers on sorting methods and programming languages, and is at present writing one of the volumes of the IBM Systems Programming Series.

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Dr. Chandy is an Associate Professor of Computer Sciences and Electrical Engineering at the University of Texas at Austin. His current research interests include modeling of computer systems, networks, and reliability. He was a consultant to the Computer Sciences Department at the Thomas J. Watson Research Center. Formerly, he worked as a staff member at the IBM Cambridge Scientific Research Center in 1969-1970, and as an associate engineer at Honeywell EDP in 1966-1967. He received a B.Tech. in 1965 from the Indian Institute of Technology, Madras, in 1965, and an M.S. in 1966 from the Polytechnic Institute of Brooklyn, both in electrical engineering. In 1969 he received a Ph.D. in operations research from the Massachusetts Institute of Technology. He is a member of the Association for Computing Machinery and the Institute for Electrical and Electronics Engineers.

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Dr. Gaensslen is member of a semiconductor device and process design group at the Thomas J. Watson Research Center, where he joined IBM in 1966. His current technical interests involve various aspects of advanced integrated circuits like miniaturization, device simulation and ion implantation. Prior to 1966 he served as Assistant Professor in the Department for Electrical Engineering of the Technical University in Munich, Germany. During this period he was working on the synthesis of linear and digital networks. His education includes a Dipl.-Ing. and a Dr.-Ing. degree in electrical engineering, which he received from the Technical University in Munich in 1959 and 1966 respectively. Dr. Gaensslen is a member of the Nachrichtentechnische Gesellschaft. Since September 1973 he has been on a one-year assignment at the IBM Laboratory in Boeblingen, Germany.

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Mr. Gay joined IBM in 1954. His current technical assignment is the System Performance Analysis of the Hotel/Motel System. He received a Bachelor of Science in electrical engineering degree in 1949 from Penn State University and a Master of Science in electrical engineering degree from Brooklyn Polytechnical Institute in 1950. From 1962 to 1966 he was a member of the system support aids group and from 1967 to 1973 he was a member of the development group. Mr. Gay is a Senior Member of the Institute of Electrical and Electronics Engineers. He received an IBM Outstanding Contribution Award in 1967 for his work on OS-360.

Ulrich Herzog

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Dr. Herzog is a member of the teleprocessing system optimization group at the Thomas J. Watson Research Center, being mainly concerned with problems of traffic flow in complex data networks. He has been on leave from the Institute for Switching Techniques and Data Processing at the University of Stuttgart, West Germany, since March 1973. Dr. Herzog received all his degrees in electrical engineering. From 1964 to 1970 he held at various times positions as research associate, assistant professor and chief engineer at the above mentioned institute. From 1970 to 1973 he headed the informatic research group, "stochastic service and transportation processes in computers and computer networks". He has also been Privatdozent at the University of Stuttgart since 1973. Dr. Herzog is a member of VDE (Society for Electrical Engineers in Germany) and NTG (Telecommunications Society).

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Dr. Keppel is a physicist working on the development of an interactive system for radiation treatment planning. In 1964 he received his M.S. and in 1970 his Ph.D. from the Technical University of Aachen, both in physics. He was a research assistant in the physics department at the same university until 1969 where he participated in several projects in the field of high energy physics. He has been with IBM since 1969 and was involved in the development of a software system for automatic recognition of bubble chamber events.

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David B. Lomet

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Dr. Lomet is a member of the experimental compiling systems group at the Thomas J. Watson Research Center and is currently working on compiler optimization techniques. He joined IBM in 1963 as a programmer with the Federal Systems Division in the Washington, D.C., area. While with FSD, his work involved the design, implementation, and use of a number of information retrieval systems. He won an IBM resident graduate fellowship in 1966 and attended the University of Pennsylvania, obtaining his Ph.D. in computer science in 1969. His dissertation was in the field of the syntax of programming languages. Since joining the Research Division in Yorktown, Dr. Lomet has pursued the investigation of the syntax and semantics of programming languages. He received a B.S. degree in physics from Lafayette College in Easton, Pennsylvania, in 1961 and an M.S. degree in mathematics from George Washington University in 1966. Dr. Lomet is a member of the Association for Computing Machinery, the Institute of Electrical and Electronics Engineers, Phi Beta Kappa and the American Association for the Advancement of Science.

Joseph A. Lukes

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Dr. Lukes is an advisory engineer with the advanced data systems evaluation group and is involved in performance evaluation of storage subsystems. He joined IBM in 1967 as a logic designer in the Systems Development Division in Menlo Park, California. He obtained a Ph.D. in electrical engineering from Stanford University in 1972. Dr. Lukes is a member of the Institute of Electrical and Electronics Engineers, the American Association for the Advancement of Science, Tau Beta Pi, Pi Mu Epsilon, Eta Kappa Nu, Phi Kappa Phi and Sigma Tau.

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V. L. Rideout received the B.S.E.E. degree with honors in 1963 from the University of Wisconsin, the M.S.E.E. degree in 1964 from Stanford University, and the Ph.D. degree in materials science from the University of Southern California in 1970. From 1963 to 1965 he was a member of the technical staff of Bell Telephone Laboratories. In 1966 he spent a year as a research assistant in the department of materials science at the Technological University in Eindhoven, Netherlands. In 1970 he joined IBM in the device research group where he worked on fabrication and contact technology for multiheterojunction "superlattice" structures using gallium-arsenide-phosphide and gallium-aluminum-arsenide. Since 1972 he has been a member of the semiconductor device and circuit design group. Dr. Rideout's current research interests concern high density silicon FET technology. He holds 3 U.S. Patents and is a member of the Institute of Electrical and Electronics Engineers, the Electrochemical Society, Tau Beta Pi, Eta Kappa Nu, Phi Kappa Phi, and Sigma Xi.

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Mr. Seaman is a senior engineer with the Systems Support Aids Department, currently engaged in mathematical modeling of data processing systems. He received a B.S. degree in electrical engineering in 1957 from Columbia, and an M.S. degree

in applied mathematics from Harvard in 1958. Mr. Seaman joined IBM in 1958 in Poughkeepsie as a computer analyst, and has worked on the performance analysis of teleprocessing systems since 1961. He was project leader of the Computer System Simulator program from 1966-1969. From 1969 to 1971, he taught computer science at the University of Science and Technology at Kumasi, Ghana, under Peace Corps sponsorship. He is a member of the Institute of Electrical and Electronics Engineers.

Chu P. Wang

Advanced Systems Development Division, Yorktown Heights, New York

Dr. Wang is a member of the Data Base Design Aids Department at the Mohansic Laboratory, where his current interest is in data base systems, particularly data base design methodology, and the ultimate automation of such design techniques. He joined the Thomas J. Watson Research Center, Yorktown Heights, in 1961 and had various assignments in memory and memory-device related projects. From 1967 to 1968 he took a leave of absence to join the faculty of electrical engineering, Washington University, St. Louis, as a Visiting Associate Professor. He returned to the Information Science Department at San Jose in 1968. He received a B.S. degree in 1954 from the National Taiwan University, Republic of China, an M.A.Sc. degree in 1956 from the University of Toronto, and a Ph.D. degree from Stanford University in 1961—all in electrical engineering. Dr. Wang is a member of the Institute of Electrical and Electronics Engineers.

Hartmut H. Wedekind

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Dr. Wedekind joined the Technical University of Darmstadt in 1968 and as Professor of Computer Science is working and teaching in the field of data-base management systems. Previous to this assignment he was associated with IBM Germany from 1963 until 1968, where he worked in the fields of application development and operations research. He received an M.S. in industrial engineering from the Technical University of Darmstadt in 1960, an M.S. in operations research from the University of California at Berkeley in 1962, and a Ph.D. in operations research from the Technical University of Darmstadt in 1963. Dr. Wedekind is a member of the Association for Computing Machinery, the Computer Science Society and the German Society for Operations Research. He is author of two books, *Data Organization and Systems Analysis*.

Lin S. Woo

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Mr. Woo is a member of the TP system optimization group of the Computer Science Department at the Thomas J. Watson Research Center in Yorktown Heights, New York. His current interests involve the optimization of large computer networks and the analysis of queuing systems. He joined the Research Division in 1971. Prior to that, he worked at the IBM New York Scientific Center on mechanical and structural engineering problems. He received a B.S. degree in 1939 from the Chiao-Tung University in China, and an M.S. degree in 1951 in mechanical engineering from the Virginia Polytechnic Institute. In 1970, he received the Levy award from the Benjamin Franklin Institute of Philadelphia for his contribution to the Journal of the Franklin Institute.

Ernesto F. Yhap

Research Division, Yorktown Heights, New York

Dr. Yhap is a member of the automatic programming group in the Computer Sciences Department at the Thomas J. Watson Research Center, where he is involved with experimental compiler systems. His previous research activities included work in design automation, microprogramming systems, and advanced system architecture. He joined IBM in 1958 at the Product Development Laboratory in Poughkeepsie, where he worked on advanced technology semiconductor devices and from 1959 to 1965 was with the Advanced Systems Development Division, Mohansic, New York, where he worked extensively in digital communications, data multiplexing and data concentration systems. He transferred to the Research Division in 1965. From 1972 to 1973, while on a Research Division sabbatical, Dr. Yhap was assigned to an advanced systems planning group at IBM World Trade Headquarters, White Plains, New York. His education includes B.S., M.S., and E.E. degrees in electrical engineering from Stanford University and a Ph.D. in mathematics from the Courant Institute of Mathematics, New York University. He is a senior member of the Institute of Electrical

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Chua Lin*

General Products Division, San Jose, California

Mr. Lin is manager of the Mechanical Technology Department at the General Products Division Laboratory in San Jose. He joined IBM in 1966 in San Jose where he worked on the vacuum system in the electron beam recorder of the trillion-bit photodigital storage system for the Atomic Energy Commission. He is currently engaged in the development of air bearing sliders for disk files. His education includes a B.S. in 1965 and an M.S. in 1966, both in Mechanical Engineering from the University of California at Berkeley, and an M.S. in Electrical Engineering from the University of Santa Clara in 1970. Mr. Lin is a member of ASME.

*The paper by J. M. Fleischer and C. Lin appeared in the November, 1974 issue (Vol. 18, No. 6), page 529.

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*The biographical sketch of Chua Lin was inadvertently omitted from the November issue. It appears in the Authors section of this issue on page 92.